

INTERSESSION 2006

Revised Catalog

FULL-TIME SESSIONS, Morning/Afternoon

10A01 An Officer and a Gentleperson

Full-time morning/afternoon

Eighteenth century society divided occupations into two groups: tradesmen and professionals. The first were commoners and the second were gentlemen. The professions of that time consisted of medicine, law, the clergy, education, and the profession of arms. Down to the present day, the profession of arms has retained a prestige which cannot be measured in dollars and cents or office perks. It can be, at times, be the most demanding of all professions and requires special people and special skills.

Lieutenant Pamela Rawe USN (IMSA 1995) will lead a full-time intersession for students interested in the service academies or in larger question of leadership. She will discuss what sort of people the Navy is looking for, the Annapolis experience and how to survive it, share her experiences as a naval officer, and challenge students with leadership problems which can be of value in any line of work.

Prerequisite: None

Dr. Clay Skinner, IMSA Faculty
Lieutenant Pamela Rawe, Class of 1995

10A02 CompCamp: Introducing Computer Science to Kids

Full-time morning/afternoon

WANTED: Dedicated individuals willing to take risks. Desire to learn and to teach is a must. You are invited to join the adventure where we will strive to create a computer camp for 5th and 6th grade students. Our goal will be design a 5 day camp for kids that is hands on and engaging. The current plan is to use the programs Squeak and Alice to teach basic programming concepts. Check out www.squeakland.org, www.alice.org, and www.mathmaniacs.org for a glimpse of what we might be using. If you want to teach kids how to make a short 3D animation or use binary count to 1023 on their hands, come join the team!

Prerequisite: It is our hope that you will be able to commit one week in the summer to teaching the camp. Be willing to spend a minimal amount of time preparing for camp outside of intersession week. No previous computer knowledge or experience required. Required: interest and enthusiasm.

Kora Bongen, Class of 2004
Michael Sloan, IMSA Faculty

10A03 Creative Writing Workshop

Full-time morning/afternoon

Students with an interest in writing fiction, poetry, creative non-fiction, plays or screenplays will develop work over the course of an intense week of writing in a workshop-style setting. Students will participate in a rigorous and encouraging peer-review and commentary process and will read selections of work in the forms the group is working in. Students with an interest in creative writing who consider themselves new to the experience will learn to identify sources of inspiration for their work and develop a critical eye for reading and reviewing other work in their chosen genre. Students with more experience will be asked to continue to develop their voice and thinking about rhythm, rhyme and other word choice and placement techniques will shape their prose and poetry. [Tom Leger is a second-year MFA student at Goddard College studying playwriting. He has a BA from New York University in English with a specialization in Creative Writing. He lives in New York City.]

Prerequisite: An interest in creative writing in any genre.

Tom Leger, Class of 1999

Tracy Townsend, IMSA Staff

10A04 Drawing for “Left-Brainers” – a week of drawing and art-related activities for beginners or more advanced

Full-time morning/afternoon

This Intersession is a week of art training, focusing on basic drawing skills and how to use them in everyday life. Students will learn how drawing and creativity relate to the different hemispheres of the brain and how this issue can affect creative abilities. Activities will include lots of drawing and sketching in different mediums and locations, some right/left brain experiments, readings and discussions, and one-on-one individual help. There will also be some short field trips and a few surprises.

Prerequisite: NO previous drawing skills required

\$40.00 maximum fee for art supplies

An open mind

A positive attitude toward self and others

This course is not for the faint of heart!

Leigh Vashey, IMSA Resident Counselor

Sarah Blosser, IMSA Resident Counselor

10A05 Explorations in Latin America

Full-time morning/afternoon

This course will examine links between the past and present in Latin America and expose students to some of the region's fascinating cultural achievements. Present issues such as immigration, the environment, and politics as well as art, literature, and music will be touched on via oral presentations, film, and student

research. A field trip to the Mexican Fine Arts Center, Chicago to attend the opening day of the new exhibit, "The African Presence in Mexico" is planned for the last day of the course. Although the course gives much attention to Mexico, we will pay attention to aspects of Central and South America as time permits.

Prerequisite: None--only a desire to study and enjoy Latin American history and culture!

Dr. Jean Kadel, IMSA Faculty
Socoro Cintrón, IMSA Faculty

10A06 Exploring Medicine at Rush University

Full-time morning/afternoon

Contemplating a career in medicine or the health sciences? Then come spend a week at Rush Medical College of Rush University where you can explore the spectrum of medicine all in one week! You will start out as a "medical student" in the anatomy lab looking at cadavers and radiographs. Then follow a mock patient from Emergency Room to Operating Room as a "resident" at the Rush University Medical Center. You will also have a chance to visit one of the free clinics where Rush medical students volunteer and learn some basic physical exam skills. Come meet Rush faculty, attendings, and of course, IMSA alumni!

Prerequisite: None

Sharon Gates, Professor, Rush Medical College of Rush University
Christen Klochan, Class of 1999
Mita Patel, Class of 2000
Sylvie Chau, Class of 2000
Jason Siefferman, Class of 1999

10A07 Food of the Middle East & Mediterranean

Full-time morning/afternoon

Students will learn about the food from such countries as Lebanon, Afghanistan, Ethiopia and Morocco. They will study recipes and then prepare dishes from those places.

Prerequisite: Cost of the food will be split among the students. Estimated cost per student: \$50.00 - \$75.00

Jonathan Besancon, IMSA Faculty
Clement Robinson, Current IMSA Student

10A08 Hop on the Bus: A Primer on Exploring College Campuses

Full-time morning/afternoon

Your parents have already decided that you will go to college, of course. But which one? And why are you going? Should it be a large state school? Or, a

private liberal arts college? Or, a comprehensive research university? Sign up for this intersession and you'll find answers to all of your questions -- and you'll have the opportunity to explore three college campuses.

Prerequisite: Open to juniors only.

Phil Trout, IMSA Staff
 Julia Husen, IMSA Staff
 Danielle Calhoun, IMSA Staff

10A09 Inquiry for Intersession

Full-time morning/afternoon

Students may pursue their Inquiry Investigation half-time, or full-time for Intersession.

Prerequisite: Approved plan of Inquiry and permission from Inquiry Advisor and Coordinator of Student Inquiry.

Dr. Judy Scheppler, IMSA Faculty

10A10 Science Explorers: The Search for the Guilty Pathogen

Full-time morning/afternoon

Teaching kids rocks! If you like working with kids you will love this intersession! Participants will explore the systems of the human body, develop a hands-on, problem based curriculum and have a blast testing it. This curriculum will be for a week long day camp for kids in 5-6th grade.

Prerequisite: We ask that if you participate that you consider teaching summer camp (for community service hours) and/or teaching activity testing field trips that happen here at IMSA in the spring term on I days.

Michelle Kolar, IMSA Staff
 Pooja Agarwal, Class of 2001

10A11 The Way of Go/Wei Chi/Baduk

Full-time morning/afternoon

Go is to philosophers and warriors as chess is to merchants and accountants. See why Mao had all of his generals learn to play the ancient Asian game of Go or Wei Chi. We will learn, play and practice Go as well as read and view some fascinating history and literature about this remarkable board game.

Prerequisite: None

Michael DeHaven, IMSA Faculty

10A12 IMSA on Wheels: The Science of Magnets and Electricity

Full-time morning/afternoon

Teaching science rocks! Come get involved in the IMSA on Wheels science show that travels to elementary and middle schools performing science shows, written by IMSA students. You will be trained in presentation skills as well as Magnets and Electricity demonstrations and tie it all together around an exciting, engaging script.

Prerequisite: Participate in a few if not all post intersession elementary and/or middle school shows scheduled on Wednesdays and/or evening and weekends. Times and dates are yet to be scheduled for the spring.

Meng Zhang, Current IMSA Student
 Noelle Kwan, Current IMSA Student
 Qi-Yuan Gou, Current IMSA Student
 Michelle Kolar, IMSA Staff

10A13 The Essence of Okinawan Shorin-Ryu Karate

Full-time morning/afternoon

This course is designed for both beginners and experienced martial artists. Although the course will concentrate on the teachings of Matsubayashi Shorin-Ryu, aspects of Tae Kwon Do and other martial arts will be incorporated as well. Students will learn valuable self-defense strategies and sparring techniques, as well as the Zen philosophy and rich history behind Matsubayashi Shorin-Ryu. There is a fieldtrip to a Tae Kwon Do school in Wheaton scheduled for Wednesday evening. In addition, students who develop a firm grasp of the concepts and techniques taught during the intersession will have the opportunity to test for rank at the end of the week.

Prerequisite: All students must wear a traditional white uniform to class each day. The costs associated with this intersession include: \$30.00 for a white traditional uniform (mandatory, unless you own one), \$30.00 for the rank-certification test (optional), and a \$5.00 equipment fee (mandatory).

Cynthia Dang, Class of 2003
 Dean Dieker, Class of 2003
 Amanda Townsend, Class of 2004
 Brian Baker, Class of 2005
 Dr. David Evenson, IMSA Staff

FULL-TIME SESSIONS, Afternoon/Evening**10B01 Angels vs. Devils – Ethical Decision Making at IMSA**

Full-time afternoon/evening

This program is looking for a diverse group of bright and motivated young people who must be inspired to learn and wish to pursue their learning with similarly motivated students. Does breaking the rules at IMSA hurt anyone? What does

being an ethical leader mean? For more than 30 years, Americans have believed that the younger generation is less respectful and knowledgeable, more alienated, sexually promiscuous, and more unethical than ever before. Is this true or are the youth of today more ethical, or just as ethical as past generations? This session will take a page out of college ethics classes while using IMSA's inquiry-based learning concepts. Don't be fooled. This is not a boring intersession as it will be team taught with highly fun and engaging sessions!!

Prerequisite: None

Robb Gill, IMSA Hall Coordinator
 Stuart Henn, IMSA Hall Coordinator
 Jean-Paul Viray, IMSA Resident Counselor

10B02 Basic PADI Scuba Certification

Full-time afternoon/evening

This course is developed for those adventurous, thrill-seeking individuals who love the water. This weeklong PADI Open Water Certification course is comprised of classroom lessons, and hands-on training in the IMSA pool. Those in the course will be supervised, instructed, and assessed by an off-campus PADI Certified Instructor. This Open Water Certification course requires an open water dive, which will take place at Haigh Quarry in the spring. Scuba diving is an activity that is popular worldwide, which means that once you are certified, you can go anywhere and dive. In addition, it is only necessary to get certified once in your life, so once you have passed this course, you can enjoy a lifetime of scuba diving.

Prerequisite: Students must be able to swim comfortably. They must own fins, a snorkel, a mask, and boots. If needed, these students may purchase these items from the store that we will be working with.

\$300.00 TOTAL

Includes:

Entry fee to Haigh Quarry

Rental of all necessities

Direction

If students do not already own them, they will need to purchase a mask, fins, snorkel, and boots (~\$150.00). If student does not own the aforementioned items,

TOTAL = \$450.00

Jim Atols, IMSA Staff

10B03 Brush and Chisel, Light and Mind: A History of Western Art from 1300-2000

Full-time afternoon/evening

In the year 1520, the Italian painter Raphael died suddenly and unexpectedly. Impressed with the body of his work, the papal government chose to have him buried in the Roman Pantheon, an incredible honor for a common man. Artists occupy a special place in society, often exalted and scorned at the same time. In

this intersession, we will examine the history of Western Art over the last seven centuries, from the Humanism of the Renaissance to the post-modern approaches of the 20th century. We will place the material in intellectual and social context, and we will consider the relationship between the lives and the works of individual artists. However, the heart of the experience will be the analysis and discussion of visual images of the art itself. If possible, the session will close with a trip to the Art Institute of Chicago.

Prerequisite: None

Dr. Rob Kiely, IMSA Faculty

HALF-TIME MORNING SESSIONS

05A01 Analysis of a Symphony

Half-time morning

In this intersession, we will listen to (5) symphonies, then discuss what occurs (analysis) from at least (8) different aspects. At the end of the week, the students should be able to listen to a symphony and understand the multitude of different elements that make up the work.

Prerequisite: None

Dr. Michael Keyton, IMSA Faculty

05A02 Beginning Knitting

Half-time morning

Learn how to cast on, knit, purl, make a cable, bind off, and read a pattern while making an attractive scarf. Each day, we will learn a new stitch, technique, or pattern to add to our scarf. We will also learn about different kinds of yarns, patterns, equipment, finishing techniques, and how to fix mistakes. With this knowledge, you will be able to move on to more complicated patterns and develop skills that you can use for the rest of your life!

Prerequisite: Student will need to bring/purchase 200 yards of a smooth, worsted weight yarn in a light color (not black or navy blue), and a pair of size 10 ½ or 11 knitting needles. Cost could range from \$8.00 - \$15.00, depending on the materials.

Have never knitted before, or are a beginner that wants to learn more about the craft.

Aria Reynolds, Current IMSA Student
Chandra Reynolds, IMSA Parent

05A03 Beginning Swimming

Half-time morning

Beginning Swimming is designed to help non-swimmers and beginning level swimmers develop the water skills necessary to achieve personal safety and self-

confidence in an aquatic environment, as well as to help these students begin to propel themselves through the water more efficiently. Students who have not passed all aspects of the basic swim survival test during Sophomore Wellness class, as well as those who desire to improve their aquatic skills, are encouraged to take this class.

Prerequisite: None, but bring suit, towel, lock, and swim goggles (a must).

John Martin, IMSA Faculty

05A04 Computer Security

Half-time morning

Interaction with complex computer systems has become so routine that most people don't even know it when they're using a computer. Ever buy lunch with a credit card? Ever ride public transportation? When you swiped your credit card or touched your farecard to the turnstile, you set into motion a complex exchange of data between many different computers. Each one of these computers must be secure or the system will fail and your personal information will be compromised. Security is perhaps the most important part of any computer system but it often overlooked.

This course will cover the places where security is overlooked. We will learn how attackers find security holes, what the holes are and how they work, and how to fix them. We'll do this by examining real-world systems (like web applications and server software) and finding security problems in computer software that you use every day. In our examination, we'll see how hackers can take over computers due to problems in the mail server, how a malicious user of a web forum can impersonate others, how viruses spread, how someone with a laptop in a coffee shop can read your e-mail, and much more. The level of detail will be technically advanced, but accessible to people who have never thought about computer security.

Specific areas to be covered include analysis of Perl- and PHP-based web applications, web browsers, e-mail systems, UNIX, C, the ethics of 'hacking', and public-key cryptography.

Prerequisite: In-depth understanding of computers. The course won't involve programming, but basic programming knowledge will make the course easier to understand.

Jonathan T. Rockway, Class of 2004

05A05 Dynamical Systems

Half-time morning

We will study the mathematical properties of systems undergoing change and see how the mathematics relates phenomena such as the spiking pattern of a neuron with the movement of a particle. Our approach will avoid the advanced mathematics and instead apply algebra and geometry to see how various types of equations can describe particle trajectories (like lines, spirals, and ellipses) in two-dimensions. After getting an intuitive feel for dynamics in lower dimensions,

we will generalize and examine the same concepts in higher-dimensional models. We will conclude by applying what we have learned to analyze a mathematical model for intermittent bursts of neural activity.

Prerequisite: None

Pranav Kiran Parekh, Class of 1992

05A06 Getting the Most Out of Life

Half-time morning

Everybody talks about what life is like in college, but nobody ever tells you what to expect. How do I know what career is right for me? What happens when my dream career is not so dreamy? How do I balance my work and personal life? How do I afford to live the life I want to while finding a career that makes me happy? These are just some of the questions you may be asking yourself in the next ten years. Why do I care now, you ask? Preparedness for real life begins not when you walk off the college campus for the last time, but right now...today...in the decisions you make, the attitude you take and your willingness to embrace new ideas and challenge your own status quo. Open discussion about the opportunities and challenges you will face on a day-to-day basis over the next 10 years, including finances, careers, relationships, health and personal happiness.

Prerequisite: None

Morgan Hawker, Class of 1995

Patty Sullivan, Class of 1995

05A07 History through Conflict Simulation

Half-time morning

This intersession will engage each student in at least one important conflict simulation (The Battle of Waterloo, Operation Cobra, The Siege of Jerusalem, etc.). The student will gain knowledge of the tactical, operational, strategic, and leadership realities of conflict. Students will form "teams" which will play a set simulation. Some games can have several players, while some are best handled by two.

Prerequisite: Students must attend a pre-intersession planning meeting before the Winter Break.

Dr. Lee Eysturlid, IMSA Faculty

05A08 Introduction to Alternative Medicine

Half-time morning

An overview of current alternative medicine methods and modalities will be presented, along with more in-depth reviews of selected topics. Course topics will include Western traditional methods, Western adaptations of Eastern methods, Western modern methods, public policy and current political issues surrounding the industry. The approach will be centered from a holistic/naturopathic approach

and will compare and contrast to current allopathic approaches. Course content will be fluid to some degree based on student interests.

Prerequisite: Prior to class, students should compose a list of alternative medicine methods that they personally have either experienced or been exposed to in their lifetimes.

Scott Swanson, Class of 1990 and Current IMSA Staff
Julia M. Colby, Class of 1996

05A09 Math Explorers

Half-time morning

Students will create and refine curriculum for the summer math program “Math Explorers”, which is a one week summer program for seventh and eighth grade students offered through the Kids Institute. Students will be active in learning topics from geometry, mathematical games and puzzles, Fibonacci numbers, and fractals in preparation for teaching in the summer program.

Prerequisite: Students may choose to teach in the summer program.

Dr. Steven Condie, IMSA Faculty
Michelle Kolar, IMSA Staff

05A10 Middle Eastern and Indian Dance

Half-time morning

Students participating will learn a variety of Belly Dancing and modern Indian dance steps, including slow and fast-paced movement. Students will also learn more about the culture and origins of Middle Eastern and Indian dance. A performance at the end of the Intersession is planned.

Prerequisite: Females only. Dance experience is encouraged, but not required. If possible, students should wear a long skirt that covers the knees.

Pooja Agarwal, Class of 2001
Dr. Dana Goodman, IMSA Faculty

05A11 Old-Time Radio: Horror and Science Fiction of the Golden Age

Half-time morning

During the Golden Age of Science Fiction and Horror Fiction in the 1930s through 50s, another Golden Age was going on - that of Radio. All of the classic short stories of these genres were quickly adapted for radio in high-quality productions. In this class, we will listen to 1-3 short radio stories or plays per day, and seek to understand both how these stories and the way they were presented on radio reflect American society of our grandparent's era.

Prerequisite: None

Eric Engelhard, Class of 1996

05A12 Paris in the Springtime – (Trip taken during Spring Break)

Half-time morning

Students will spend (9) days in Paris, during Spring Break, visiting historically and culturally significant sites, interacting with French people, and experiencing everyday Parisian life.

Prerequisite: This experience will take place during Spring break; however, selected participants will be expected to be on campus during the January intersession to prepare for the trip. Preparation includes classes on cultural and travel expectations, and research.

Students will meet during the mornings; they are expected to enroll in another 1/2 time afternoon or evening session. The Paris experience is open to students presently enrolled in a French course. An application essay (in English) will be used in the selection process.

\$1,500.00, plus expenses for lunch and dinner, and some cultural events. Additional costs will vary according to the individual. Detailed information will be provided in the letter and itinerary sent to all French students and their parents. Additional costs may include the fee for a U.S. passport, if the student does not already have one.

A deposit of \$500 per student will be required on January 9, 2006, the first day of Intersession. Students must submit an application and RC recommendation by October 17, 2005. Dates for the trip: Sat. March 25th-Sunday, April 2nd, 2006 (or possibly Monday, April 3rd). Subsequent deposits of \$500 each are due Feb. 1, 2006 and March 1, 2006.

Brenda Crosby, IMSA Faculty
Willa Shultz, IMSA Faculty

05A13 Photoshop is for Lovers: An Introduction

Half-time morning

This session is designed to introduce the common student to the magnificent world of Adobe Photoshop: Creative Suite. After going over the basic tools, this course will progress on to more complex topics such as image editing, photo restoration, coloring, collaging, and some web related features. Daily activities include projects of all sorts, demonstrations, and showcasing. After this course, the students will be able to use Photoshop to their advantage in all facets of their lives.

Prerequisite: No previous experience needed!

Dr. Jim Victory, IMSA Faculty
Cathy Gao, IMSA Student
Yuxi Ji, IMSA Student

05A14 Practical Self Defense

Half-time morning

Avoiding fights are the best way to avoid harm. But can you defend yourself if you needed to? Do you know how to protect yourself from an attacker with arms flailing? Do you know what to do in a situation where an aggressor is about to hurt you? This intersession can show the basic techniques you can use to get out of danger when your life is threatened.

Prerequisite: Possibly a waiver form (if needed by IMSA administration)

Viral Shah, Current IMSA Student
 Fred Yankowski, IMSA Staff
 Kate O'Brien, IMSA Resident Counselor

05A15 Professional Business Communication

Half-time morning

The purpose of this intersession is to teach students the fundamentals of written and oral business communication. The intersession shall cover such topics as Resumes, Cover Letters, Interviews, Memos, Emails, Reports, Policy Writing, and Oral Presentations. Students will be given a chance to develop their own documents and have them be focus on direct (to the point) writing which is more commonly used in the business world than academic writing most students are accustomed to. Students will also have a chance to sample and critique writing samples from the workplace.

Prerequisite: None

Sam Chen, Class of 2004
 Dr. Dennis Czerny, IMSA Faculty

05A16 Rap, Hip-Hop and Social Critique

Half-time morning

This course will investigate Hip-hop music and culture as a significant social movement, with attention to historical context, themes, motifs, and socioeconomic issues. We will begin with the origins of Hip-hop in late '70s Harlem and Queens, analyze precursors (African griots, African American poetry, Reggae, etc.) and trace its development to the present day.

Prerequisite: Background readings (approximately 20 pages) before Intersession week.

Dr. Grace Glass, IMSA Faculty

05A17 The Coming Plagues

Half-time morning

This intersession will examine the potential negative interactions between microbes and humans. We will look at few “plagues” from history (The Black Death, Influenza of 1918, Cholera pandemics), and then spend most of our time talking about microbes which might cause epidemics and/or pandemics in the future. We will spend some time talking about the microbe’s ability to cause disease (pathogenicity) as well as the human’s ability to resist disease (immune response). The social and economic implications of epidemics will also be explored.

Prerequisite: Course Prerequisites: Scientific Inquires, Biology, and at least one course in biology (pre-IMSA or biology elective at IMSA).
Helpful elective: General Microbiology.

Dr. Ed Goebel, IMSA Faculty

05A18 The Ecology of Entrepreneurship: Explore the Environment in Which Entrepreneurs Operate

Half-time morning

Screening ideas that have potential as real businesses requires a working knowledge of many business disciplines, and a set of entrepreneurial tools - both quantitative and qualitative. This primer will cover the basics of business, including marketing, sales, law, strategy, and public speaking. It will de-mystify the basics of venture capital, intellectual property, entrepreneurial teams and the opportunities entrepreneurs pursue.

Students will explore an idea with commercial potential and then present it to their peers and a panel of experts.

Prerequisite: *It is strongly encouraged that this Intersession be taken in conjunction with the evening session: "In the Trenches: Discussions with Entrepreneurial Leaders". This, however, is not required.*
Come with an idea you think has entrepreneurial potential.

Paul Strasma, Class of 1994
Joshua A. Gerlick, Class of 1999
Nick Scholtes, IMSA Staff

05A19 The Physics and Biology of Fishing

Half-time morning

Fishing is the number one non-spectator sport in the United States. Participants will learn the equipment and techniques used to be successful at this sport. Participants will also learn history and conservation practices.

Prerequisite: Students need to bring a fishing pole from home. If pole is not available, see instructor regarding specific rod/reel to purchase – only cost involved.

Branson Lawrence, IMSA Faculty, Chris Kawa, IMSA Faculty

05A20 The West Wing as a Tool to Understand Modern Politics

Half-time morning

The West Wing is a critically acclaimed television show depicting a fictitious White House administration. It has a strong correlation to modern politics and current events. Students in this intersession will view episodes of the West Wing followed by discussion and debate about the topics and issues raised.

Prerequisite: Eyes, ears, and a willingness to engage in lively discussion and open debate.

Daniel Kador, Class of 2002

Zouyan Lu, Class of 2002

Kyle Wild, Class of 2002

HALF-TIME AFTERNOON SESSIONS**05B01 A Mozart Celebration**

Half-time afternoon

To commemorate the 250th anniversary of Wolfgang Amadeus Mozart (1756-1791), we will explore some of his major works -- concertos, symphonies, and, especially, his operas. A highlight of this intersession will be attending a Lyric Opera performance.

Prerequisite: \$30.00 for cost of Opera ticket

Michael Sloan, IMSA Faculty

05B02 Advanced Volleyball

Half-time afternoon

Students will engage in practical sessions that will teach and develop the advanced skills & tactics of volleyball. These will include but are not limited to jump serving, jump setting, swing blocking, diving/rolling, and hitting approach angles for various hitting techniques, defensive rotations and offensive plays. Students will also watch and analyze the game of volleyball at a high level (the collegiate level).

Prerequisite: Students will be expected to have:

1. Knowledge of the basic and intermediate skills and strategies of volleyball.
2. Experience playing volleyball.
3. A general level of fitness that will allow participation in intense physical activity.

This intersession would require Friday evening trip to

men's collegiate game which would involve possible overnight costs.

Elaine McCulloch, IMSA Staff
Barbara Baber, IMSA Faculty
Jon Delich, Class of 2004
Mandi Heikes, Class of 2005
Aaron Hutcherson, Class of 2005

05B03 AMC/AIME/USAMO Intersession

Half-time afternoon

Every year, the American Math Competitions (AMC) hold nationally administered contests to determine the U.S. team to participate in the International Math Olympiad. The AMC 10 & 12 are 75-minute, 25-question multiple choice examinations which all IMSA students are required to take. Approximately 12,000 students (100 or so from IMSA) qualify to take the next contest - the American Invitational Math Exam (AIME), a 3-hour, 15-question test where answers are integers from 0 to 999, inclusive. About 250 students across the nation qualify for the next stage - the U.S.A. Math Olympiad (USAMO), a 9-hour, 6-question essay/proof exam to be done over two days. In this intersession, we'll prepare for these contests by discussing problems and test-taking strategies, in addition to answering any questions you may have. We'll hold sessions at two different levels - one geared towards short answer contests such as the AMC/AIME, and the other focused on Olympiad problems and the USAMO. At the end, we'll administer a practice test at each level, and provide feedback.

Prerequisite: Preferably MI III or above, some problem-solving experience.

Tony Liu, Current IMSA Student
Rajeev Nayak, Current IMSA Student
Bill Chen, Current IMSA Student
Dr. Rob Flemming, IMSA Faculty

05B04 Basics of Medical and Clinical Science

Half-time afternoon

Ever wonder what medical school and practicing medicine is like? Interested in medicine as a career? This intersession will cover topics from the basic medical sciences, normally covered in the first two years of medical school, in a lecture and discussion based format. The basics of physical diagnosis will also be taught. Students will then learn how to integrate the basic sciences in clinical diagnosis and treatment, including true clinical scenarios. For example, students will be able to understand the basic underlying physiology, histology, anatomy, pathology, and pharmacology of the cardiovascular system and apply that knowledge to a fictional patient with chest pain.

Prerequisite: Juniors and Seniors who are interested in medicine as a career.
Real cadaver specimens may be used in this Intersession –
students who feel they cannot tolerate handling real human
specimens should not apply.

Saugar Maripuri, Class of 1999

05B05 Beginning Swimming

Half-time afternoon

Beginning Swimming is designed to help non-swimmers and beginning level swimmers develop the water skills necessary to achieve personal safety and self-confidence in an aquatic environment, as well as to help these students begin to propel themselves through the water more efficiently. Students who have not passed all aspects of the basic swim survival test during Sophomore Wellness class, as well as those who desire to improve their aquatic skills, are encouraged to take this class.

Prerequisite: None, but bring suit, towel, lock, and swim goggles (a must).

John Martin, IMSA Faculty

05B06 Creative Thinking and Problem Solving

Half-time afternoon

This course will teach a seven step word problem solving strategy called "Beating the Fear Factor in Word Problems". Additional activities will involve exploring the role of intuition and the subconscious in problem solving, understanding different learning and thinking preferences, conceptualizing beyond three dimensions, creative problem solving from Star Trek and terraforming Mars using a computer simulation called SimEarth.

Prerequisite: Students will be required to read "Blink" by Malcolm Gladwell prior to the start of the class.

David Gossman, IMSA Parent

Dr. Kirk Hallowell, IMSA Staff

05B07 IMSA Swings!

Half-time afternoon

With its roots going all the way back to Charleston in the 1920s, the many styles of swing dancing have been some of the most popular dances in this country for the better part of a century. That's because it's a great way to meet people, hear fantastic music, get some exercise, and show off your mad dance skills.

You say you don't have mad dance skills? Well, then this is the class for you! We're going to start with the easiest, most approachable styles of swing and build it up from there. Anyone can do it. By the time you're done with this class, you'll be able to go to a swing event anywhere and join in the fun. For you who've had some exposure to swing before, great! We'll tighten down your fundamentals so that you've got extra spit and polish, and we'll cover nifty new material you haven't seen before. We take requests if you've got something in mind. :)
Be there or be square!

Prerequisite: None

Neal Groothuis, Class of 1997 and Current IMSA Staff

Amber Thompson, Class of 2003

05B08 Introduction to Aromatherapy

Half-time afternoon

The use of essential oils has been documented as a therapeutic and societal practice for thousands of years. We will cover the historical and scientific underpinnings of this intriguing blend of science, art, and healing. We will then look at the modern approaches to aromatherapy, see how they differ from commercial perfumery, and culminate with each student creating his or her own personalized essential oil blend.

Prerequisite: Students with concerns about allergies may wish to speak to the instructor to address these concerns prior to signing up for this session.

\$12.00 lab fee per student

Scott Swanson, Class of 1990 and Current IMSA Staff

05B09 Introduction to Middle Eastern Studies: Focus on the U.A.E.

Half-time afternoon

The course begins with an elementary introduction to Middle Eastern religion and geography. Students will then examine a wide variety of media over the past 30 years, discuss literature (Adventures in Arabia: Among the Bedouins, Druses, Whirling Dervishes, and Yezidee Devil Worshipers and Mother Without a Mask), analyze Islamic Art, and view a Fulbright grantee's presentation about the education of women in the United Arab Emirates.

Prerequisite: Read Adventures in Arabia: Among the Bedouins, Druses, Whirling Dervishes, and Yezidee Devil Worshipers

Read Mother Without a Mask

Katherine Flansburg, Class of 1999

05B10 Kids Institute: Harry Potter Workshops

Half-time afternoon

In relation with KI, students will be designing and writing a science curriculum based on Harry Potter themes; this curriculum will be taught as Workshops in the spring 2006 to interested fifth and sixth graders. The three themes are: the chemistry in Potions Class, the biology in Herbology, and the physics in Quidditch, along with other possible Hogwarts activities, such as the Sorting Ceremony. Students will explore the sciences behind the HP themes and present their proposed ideas to the group. In addition, students may, but are not required to, help teach the Workshops in the spring at IMSA.

Prerequisite: None

Mi (Amy) Chen, Current IMSA Student
Tracy Miller, IMSA Staff

05B11 Neural Networks

Half-time afternoon

We will examine algorithms commonly referred to as neural networks, which are interesting because of their ability to "learn" based on feedback. These algorithms are used to characterize and predict future outcomes of statistical processes with complex interactions, with applications ranging from neuroscience to fraud detection by credit card companies. We will cover the basic structure of all neural networks (layers, nodes, connections, activation/transfer functions), practice drawing network diagrams, and build simple networks in Microsoft Excel. We will also discuss some of the theory and its limitations.

Prerequisite: None

Pranav Kiran Parekh, Class of 1992

05B12 Preparations for Living and Learning in Germany

Half-time afternoon

Participants in this intersession will prepare themselves for the experience they will have during the GAPP exchange with our partner school, KLG. The focus of the intersession will be Berlin and Erfurt, the two cities where the student will live for (4) weeks. The sponsors will direct student research and inquiry on the historical, cultural and socio-political institutions of the (2) cities. Student will prepare two short research projects which they will present on-site in Berlin and Erfurt. The session will be conducted in German and English and is open to students who plan to participate in the exchange.

Prerequisite: Open to students who plan to participate in the GAPP exchange.

John Stark, IMSA Faculty

Dr. Christian Nokkentved, IMSA Faculty

05B13 Puttering With Potter

Half-time afternoon

This course will examine, explore, and critique the Harry Potter books and movies, both as literature and entertainment. If feasible, we will also view together the new installment of the Harry Potter movie which will be in theaters by Intersession. Student will also research the reviews of the Potter books and movies. (continued on next page).

Prerequisite: Students should have read the Harry Potter books before Intersession week, including the sixth book.

Cost of admission to movie theater.

Dr. Dennis Czerny, IMSA Faculty

05B14 Quantum Mechanics for Disbelievers

Half-time afternoon

“God doesn’t play dice,” said Albert Einstein. “Albert,” said Niels Bohr, “Don’t tell God what to do!” Quantum Theory, developed in the 1920s, is the most radical, wild, counterintuitive theory ever conceived. Nevertheless it works. The course will cover the data that forced physicists to propose such a bizarre view of nature. We will illustrate how the theory is used to give us an understanding of atoms, electrons, molecules, and eventually such inventions as iPods and cell phones. Oppenheimer said, “There are children playing in the streets that could solve some of my top problems in physics, because they have modes of sensory perception that I lost long ago.” You can say what you think this beautiful theory is trying to tell us.

Prerequisite: None

Dr. Leon Lederman, IMSA Staff
 Dr. John Eggebrecht, IMSA Faculty

05B15 Science Olympiad Intersession

Half-time afternoon

With competitions right around the corner, the SciOly intersession will provide additional time and aid to practices that can’t be done in a dorm room. The design events featured will be Tower Building, Storm the Castle, Robot Ramble, Wright Stuff, and Scrambler. The lab events featured will be Food Science, Chemistry Lab, Circuit Lab, Physics Lab, and Write It Do It. The Grainger Workshop will be open all week for designers to continue building and perfecting competition models. Lab activities will also be set up where potential team members can practice faster and more efficient techniques. With a whole week devoted to delving deeper into design ideas and lab concepts, we can enhance teamwork and competition skills needed for the contests.

Prerequisite: None

Yifan Sun, Current IMSA Student
 Tingting Wu, Current IMSA Student
 Josie Wallmuth, IMSA Faculty

05B16 The Holocaust and the Concept of “Choice”

Half-time afternoon

A literary, historical, and philosophical approach to the Holocaust, in which we will look at how and why choices were made in this environment and the significance of those choices. We will also be looking at philosophical interpretations of choice from before, during and after the Holocaust, and reviewing what kind of an influence the Holocaust had on these schools of thought. The class will be expected to follow readings and participate in class discussions. There will also be a visitation to the Holocaust Memorial Foundation.

Prerequisite: None

Aaron Ottinger, IMSA Resident Counselor

05B17 Theatrical Storytelling

Half-time afternoon

This course will explore the basic methods of theatrical storytelling. Students will work as an ensemble to create basic stage pictures based on a text, develop those pictures in to simple scenes, and ultimately combine scenes to create a unique re-telling of the original script. Emphasis is on text analysis and utilizing Aristotle's six elements of drama -- plot, thought, character, diction, music, and spectacle -- to tell a clear story. Improvisational techniques such as Viewpoints will also be introduced. A great introductory course for aspiring actors, directors, designers, and playwrights, but open to non-theatre artists as well.

Prerequisite: None

Lavina Jadhvani, Class of 2001

05B18 Throwing Plates & Platters

Half-time afternoon

It takes a different approach to throwing plates and platters on the potter's wheel than it does a bowl or cup. Things really change when throwing low and wide. This intersession will explore a variety of shapes and forms related to the plate and platter, along with historical and contemporary trends. Students will participate in throwing their own plates and platters.

Prerequisite: Students must have had successful experiences throwing on the potter's wheel prior to intersession. No cost involved.

Clay Sewell, IMSA Faculty
Derick Scarbrough, IMSA Resident Counselor

HALF-TIME EVENING SESSIONS

05C01 "Cooking Gourmet"

Half-time evening

Learn to prepare beginner gourmet meals as well as tips and tricks in the kitchen. At the end of class, enjoy eating what you make as we practice the art of fine dining.

Prerequisite: \$50.00 -\$75.00 per student for food

Morgan Hawker, Class of 1995

Patty Sullivan, Class of 1995

05C02 In the Trenches: Discussions with Entrepreneurial Leaders

Half-time evening

Take business and entrepreneurship out of the classroom. Learn about "the real world" from leaders who have successfully commercialized their ideas into marketable products and services.

A live-discussion format makes this an ideal opportunity for students to learn from experts the promise and peril of starting a new venture from scratch. Students will submit questions to speakers in advance, and discussions will be held in an open forum. Ample opportunity will.

Prerequisite: *It is strongly encouraged that this Intersession be taken in conjunction with the morning session: "The Ecology of Entrepreneurship". This, however, is not required.*

Paul Strasma, Class of 1994

Joshua A. Gerlick, Class of 1999

Nick Scholtes, IMSA Staff

05C03 Intelligence: A Psychological Approach

Half-time evening

In this class we will be exploring the psychological basis for intelligence in a scholarly way. We will also look at the potential effects of intelligence on everyday life and its application to standardized testing. Theories of intelligence as well as their application will also be discussed. On the way to understanding intelligence, basic statistics will be reviewed and an understanding of stats would be useful. A culminating project investigating intelligence will be performed.

Prerequisite: None

Amber Thompson, Class of 2003

05C04 Money – Everything You Wanted to Know But Were Afraid to Ask .

Half-time evening

An introduction to the basics of personal finance with an emphasis on issues facing college students and young adults. Learn critical tips and tricks on making the most of what you have today and securing your future. Topics will include student loans and funding education, credit cards, credit scores, renting/buying housing, taxes, employee benefits (401k, insurance, etc.), checking/savings accounts, various types of insurance, investing (stocks, bonds, mutual funds, real estate, etc.), saving for education or retirement, and budgeting.

Prerequisite: Read a book on personal finance, your choice, prior to the Intersession Week

Amy Sohl, Class of 1989
David Sohl

05C05 Solving the Heat Equation

Half-time evening

If you heat a long metal bar from one end, how hot will the bar be at a particular location and a particular point in time? If you write an option contract to sell a particular stock for a particular price at a particular point in time, how much is the option worth today? Surprisingly, these two questions are closely related – at least mathematically. We will examine this relationship (one of many between physics and finance) and develop a few techniques to answer these questions. Our approach will use matrix algebra and some iterative methods to yield approximate but reasonable solutions. Of course, there are trade-offs between accuracy and computational efficiency and we will discuss some of these issues.

Prerequisite: Previous exposure to Taylor expansion and matrix multiplication. Programming experience is helpful but not necessary, since programming exercises are optional.

Pranav Kiran Parekh, Class of 1992

OFF CAMPUS TRIPS

OC01 Be a Lighthouse Keeper!!

Off Campus Trip

Full-Time

Live in the keeper's quarters for a week and help preserve the historic New Dungeness Light Station near Sequim WA. Learn about coastal navigation, tides, the Fresnel lens, marine life of the Pacific Northwest, and the history of the lighthouse and the Strait of Juan de Fuca. Enjoy snow-capped peaks, rocky beaches, eagles, seals...

Prerequisite: Cost is approximately \$800.00, to include round-trip airfare between Chicago and Seattle, round-trip shuttle fare between Seattle and Sequim, membership in the New Dungeness Light Station Association, keeper's fee, groceries while at the lighthouse, meals en route. **Contact Susan Bernal by Friday, October 14, 2005 if interested.**

**Departing on Friday, January 6, 2006
Returning on Sunday, January 15, 2006**

Susan Bernal, IMSA Staff
Jane Parker

OC02 Building Houses, Building Hope: Habitat for Humanity

Off Campus Trip

Full-Time

Participants will spend the week helping build a house in New Mexico or Georgia for low-income families as part of Habitat for Humanity's Collegiate Challenge. (www.habitat.org)

Prerequisite: 16 years of age - application based

Students must be committed to the trip in advance and attend planning meetings at the end of first semester.

\$250 per student. Students will pay their own way. Funding sources are available for interested students unable to cover the entire cost. Many sites offer complimentary lodging and meals provided by volunteers of the community.

Sarah Sanders, IMSA Resident Counselor
Linsey Crowninshield, IMSA Staff

OC03 Leaders Today: Mission Mexico

Off Campus Trip

Full-Time

In the Santa Cruz valley along the US-Mexico border, a group of 22 students, comprised of mainly LEAD/Synergy team members will embark on a seven-day eye opening adventure. The program we are working with, comprised of Leaders Today and School Voyageurs, provides a uniquely comprehensive leadership experience, bringing together voluntarism, issue education, and skills training.

Prerequisite: \$1,000.00 (which includes airfare, housing, food, transportation)
 Students must have a passion for wanting to help. After the trip, student will be required to present to the IMSA faculty and students their findings, insight, knowledge, and importance of the program.

Margot Seigle, Class of 2005

Arth Srivastava, Current IMSA student

OC04 Scuba Diving in Cancun, Mexico

Off Campus Trip

Full-Time

This trip is focused on honing the skills of a certified scuba diver. The group will have a chance to explore the underwater environments of Cozumel, Cenotes, and Cancun over the span of six dives. Adventure seeking students may also have the choice to acquire specialty certifications. This six-day underwater adventure will not only be educational, but hands on and loads of fun. Students will learn about marine life, the various dive sites, and how to keep them safe.

Prior to Intersession, students will study of the ecosystem of the area including eco-ethical issues of degradation and marginalization, environmental conflict, conservation and control, environmental identity, common property theory; and specific topics of tropical reef environment, and indigenous species. Mayan history and culture will also be included in pre-intersession activities.

Prerequisite: Students must be certified Open Water Scuba Divers.

They must own or acquire by departure date: passport, fins, a snorkel, diving log book, and mask.

\$260.00 Airfare through ATA (round-trip)

\$120.00 Administrative costs

\$360.00 includes:

Dive Trips

Tanks

Weight Belt

PADI Dive Master

Accommodation in Hotel - 5 nights

6 dives over 3 days - 2 in Cancun, 2 in Cozumel, 2 in Cenotes

\$200 Food for Jan. 9-Jan. 13:

\$40 per day

TOTAL: approx. \$1000.00 + additional PADI certifications (if wanted) + spending money. The actual cost will be determined by air and hotel/scuba package costs at time of booking.

Carolyn Koval, Current IMSA Student
 Gary Koval, Current IMSA Parent
 Dr. Peggy Connolly, IMSA Staff

OC05 The Dark Side of Disney: Casting a Critical Eye on Mickey Mouse

Off Campus Trip
 Full-Time

Walt Disney World . . . the happiest place on earth. Or is it? This class will attempt to delve deeper into the reality of Disney as a cultural phenomenon. We will spend 5 days at Disney World enjoying ourselves, while also critically analyzing the world we discover. Topics covered will include portrayals of race, ethnicity, gender, sexuality, and class in the world of Disney; labor rights; and Disney as a corporation. Through analyzing Disney specifically, general tools of cultural analysis will be explored and practiced.

Prerequisite: If this Intersession is one of your choices, you must complete an application. Pick up application from Heidi or Jeff.

Required reading prior to Intersession week
 \$300.00 down payment due Tuesday, November 1, 2005
 \$325.00 balance due Monday, November 28, 2005

Heidi Gross, IMSA Resident Counselor
 Jeff Glotfelty, IMSA Resident Counselor

OC06 Trip to Spain (January 7 – 15, 2006)

Off Campus Trip
 Full-Time

Visit Madrid and surrounding cities (Toledo, Segovia, Avila, etc.). Improve your Spanish. Experience life in Spain's capital and enjoy cultural activities such as visits to museums, a flamenco performance, a visit to a school, a soccer game, shopping, local cuisine, etc.

Prerequisite: Open only to students enrolled in Spanish courses. Preference will be given to upper-level students. Native speakers will be considered if there is space available.

Estimated cost: \$1,300.00 (includes airfare, lodging, travel and some meals). Does not include local transportation or most meals and museum/admission charges.

José Palos, IMSA Faculty
 Dr. Aracelys Rios, IMSA Faculty